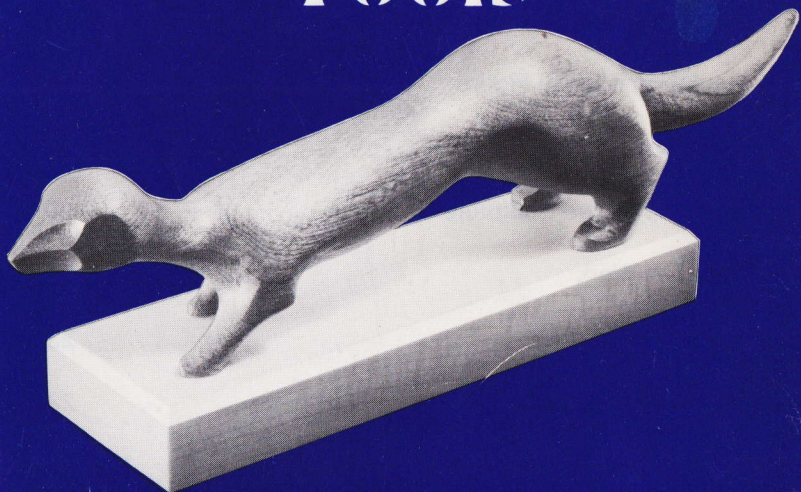


How  
to use  
your

**MARPLES**

Wood Sculpture  
Tools



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**MARPLES**

**BLUE CHIP  
WOOD  
SCULPTURE  
CHISEL & GOUGES**

Designed to appeal to a wide range of users including the serious and professional sculptor in wood, the students in Art Schools, the amateur working in evening school and at home and the schoolboy under instruction.



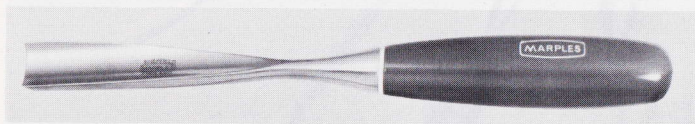


They are a complete departure in form from the Traditional carving tool, having much stronger blades with solid bolster and well accepted four square grip Marples Blue Chip handle. Bearing in mind the heavy cutting which may be encountered in sculpture work, these tools can be used without possibility of strain.

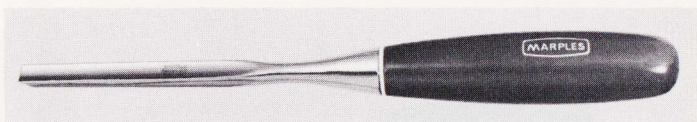


The set comprises five tools each shape having been designed with specific cutting in mind.

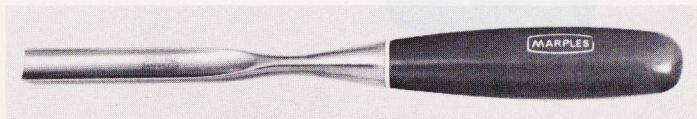
The gouges are of three distinct designs. The curves of gouges generally can be divided into two forms.



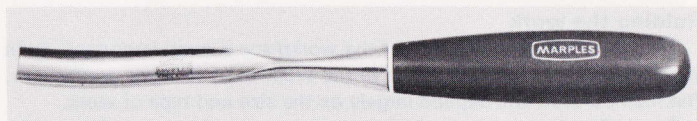
'Quick', that is gouges having sharp curves in section, i.e. deep, these are used for deep and rough cutting and it is into this group that the 1 in. fan tail gouge fits. The fan tail of the quick gouge permits the gouge to be worked in obstructed areas giving clearance for the sides of the tool where the parallel sided gouge would not.



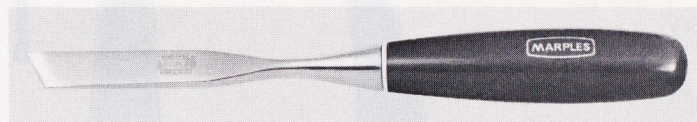
'Flat' or slow gouges as their name implies have flatter curves and are used in finishing work. The  $\frac{3}{8}$  in. falls into this category.



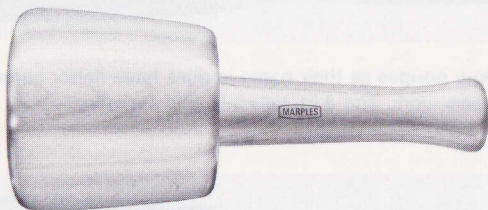
The  $\frac{5}{8}$  in. straight gouge falls between the two 'curve' styles and can be used for both roughing and smoothing and is ideal for small less complicated work where clearance for the tool is of minor importance. Smaller work could be done entirely using this tool.



The  $\frac{5}{8}$  in. Bent gouge is of the quick variety but has been specially designed with shallow work in mind, like trays and dishes. The double curve allows the tool to start cuts in the vertical and quickly move into the horizontal for shallow working keeping the hand clear of the work-piece or bench top.



The skew chisel has been designed as a general purpose tool and can be used to carry out a wide variety of cuts. It is ground on both sides like the normal carving chisel.

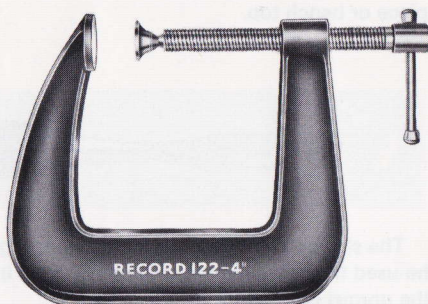


The sculpture tools will be used in conjunction with a carver's mallet, particularly when roughing out. The mallet shown is ideal for this work. Should the user feel additional weight is necessary some small holes up to  $\frac{3}{8}$  in. diameter could be bored in the head and filled with lead. They should, of course, be evenly spaced.

### Holding the work

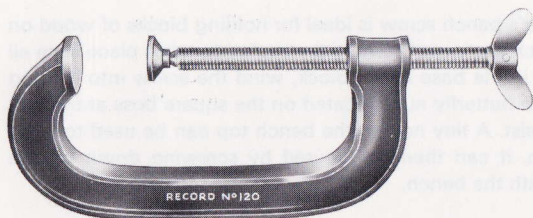
When sculpting, the holding of the workpiece is most important, since movement may result in damage to the work or even injury to the user. The method used will depend largely on the size and type of work.

For shallow tray work, the 120 G cramp used to clamp the piece to the top of the bench may suffice. The 122 deep throat cramp or the 143 jet clamp will give extra reach.

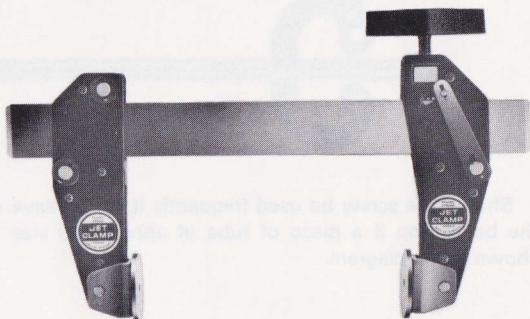


Record 122  
Deep Throat G. Cramp



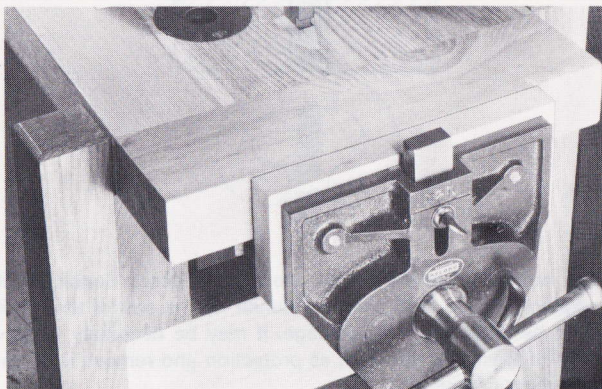


Record 120  
G. Cramp

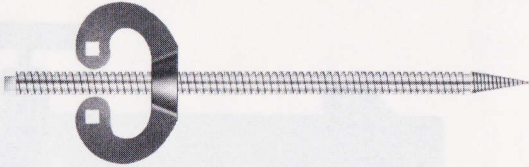


Record  
Jet Clamp 143

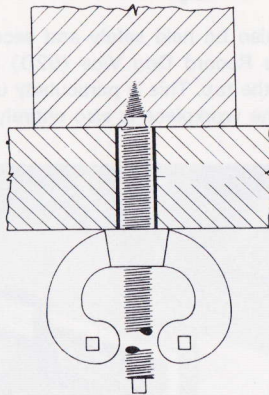
Shallow work can also be held safely and securely on a bench top which incorporates the Record Dog Vice (52D) and a series of dogs located in holes along the top. This is particularly useful where the work is of irregular shape. The workpiece is also entirely unobstructed by the holding components.



The wood carver's bench screw is ideal for holding blocks of wood on the top of the bench particularly where the sculpting takes place from all sides. Bore a hole in the base of the block, wind the screw into it using the square hole in a butterfly nut allocated on the square boss at the end of the screw to assist. A tiny hole in the bench top can be used to push the screw through, it can then be secured by screwing down on the butterfly nut beneath the bench.

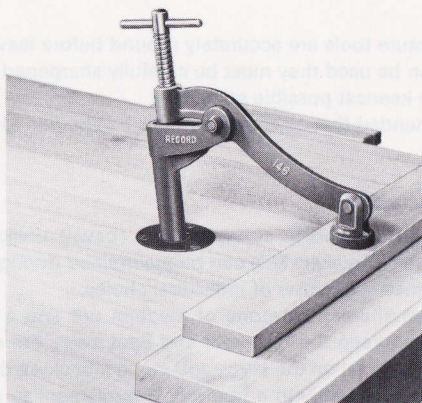


Should the screw be used frequently it would save wear and tear on the bench top if a piece of tube of appropriate size were inserted as shown in the diagram.



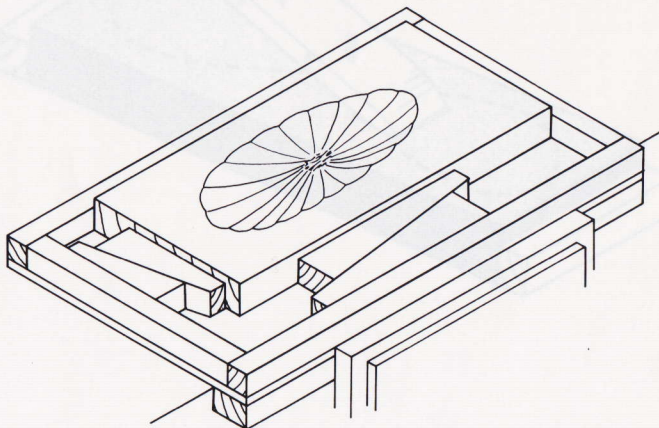
Another method of holding is by use of the Record Bench Holdfast. The workpiece can be held onto the bench by the arm of the holdfast, but it must be protected from damage, it may be necessary to leave a small piece of waste on the work as protection and remove it when the work is reaching completion.





Should the normal bench vice be used a piece of waste should be allowed for holding and sawn off when the work is complete.

Another method which is particularly useful with flat work is to screw four pieces of batten onto the top of the bench with sufficient space between them to receive the workpiece. Folding wedges can then be used to hold the job securely in place. Alternatively, a small frame, used in conjunction with folding wedges and held in the bench vice as illustrated, will be found most useful.



## Honing

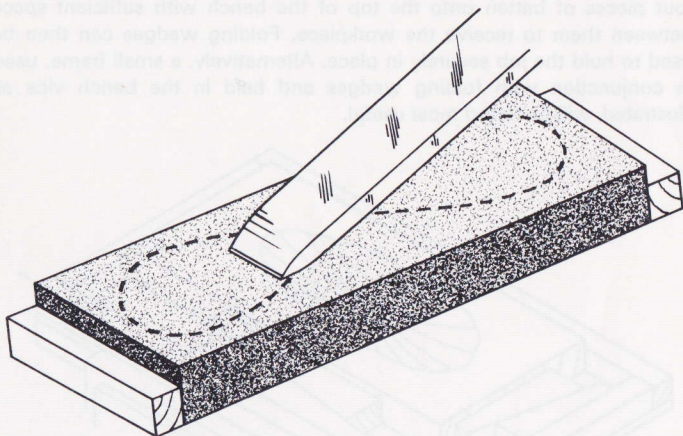
All the sculpture tools are accurately ground before leaving the works. Before they can be used they must be carefully sharpened on an oilstone to produce the keenest possible edge.

It is recommended that all sculpture tools be sharpened on the ground bevel.

## Sharpening the Chisel

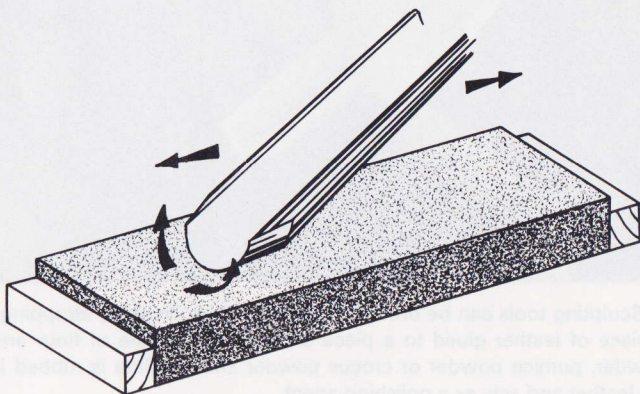
The chisel has a rolled or curved cannel (bevel) unlike the chisel of the joiner or cabinet maker. This can be maintained during sharpening or a flat bevel formed – a matter of individual choice.

Use a normal sharpening stone of medium grit and a thin oil of the '3 in 1' variety to keep the tool cool and float away the metal particles. Place the ground bevel on the stone and move it backwards and forwards along the stone, preferably in a figure of 8 movement to distribute wear over the whole surface of the stone. Do this on both bevels until a burr appears and finally breaks away, when the tool will be ready for use.

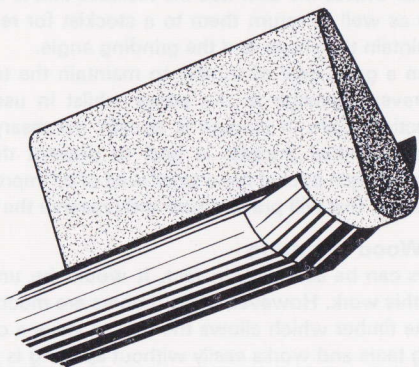


## Sharpening the Gouges

The gouge can again be sharpened on the sharpening stone. Place the ground bevel on the stone and in addition to rubbing it backwards and forwards along the length of the stone the gouge must be slowly rotated from edge to edge to finally produce a burr along the entire cutting edge.

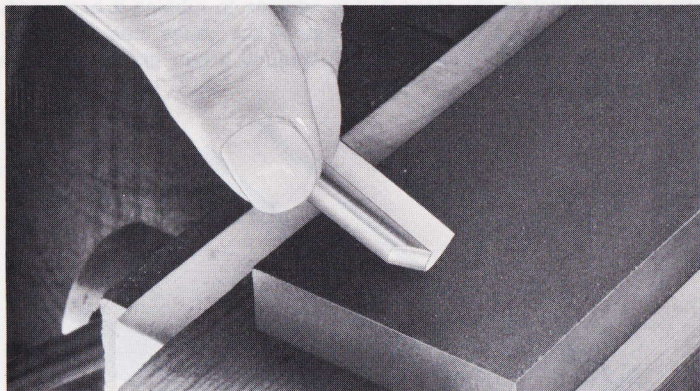


Removal of the burr is done with a suitable slipstone which must be kept flat on the inside of the gouge. Remember to keep the edge square across the end, the gouge pressed down onto a piece of wood should leave its shape evenly pressed into the surface.





A final finish can be given to the bevel by rotating the gouge, holding it at right angles to the stone and moving it lengthwise along the stone.



Sculpting tools can be brought to an even finer finish by stropping on a piece of leather glued to a piece of board. A mixture of flour emery powder, pumice powder or crocus powder and vaseline is rubbed into the leather and acts as a polishing agent.

A tool rubbed several times along the strop will produce a mirror like surface on the ground bevel. As a result of this treatment the tool moves more easily over the work, gives a finer cut and indeed burnishes the timber at the same time.

After a great deal of use and much sharpening it may be necessary to regrind the tools. Unless the user has the facilities and is knowledgeable about this it is as well to return them to a stockist for re-grinding. It is essential to maintain the shape and the grinding angle.

Having taken a great deal of trouble to maintain the tools care must be taken to prevent damage to the edges whilst in use, by avoiding metallic obstruction. Care in storage is equally necessary, a canvas or baize roll with individual pockets is best to prevent the edges from rubbing together. If each pocket has a small wad of oil impregnated cotton wool in the bottom, this will prevent rust and preserve the fine edge.

### **Timbers for Wood sculpting**

Most timbers can be sculpted, in fact, it would be unwise to reject any timber for this work. However, some timbers are much more suitable than others. The timber which allows the tool to leave a clean sharp cut without leaving tears and works easily without splitting is best.

Lime is the traditional timber of the woodcarver in the British Isles, but sycamore, oak, elm, together with most of the home grown timbers which may not be available as commercial timbers in large sizes can be pressed into use.

Most timbers in the world can be sculpted but the beginner would be well advised to choose one of the softer hardwoods, having a fairly close even grain and reasonably free from knots. Marked grain can often be used to advantage in the design but it can also have the opposite effect of destroying the line of a particular design.

All timber should be properly dried before using otherwise it will crack, warp and twist, so be careful not to sculpt in recently felled timber.

Even seasoned timber can crack in use, to a degree this can be halted by smearing with wax, but many small cracks will tend to close up when the work is completed and may in any case not detract from the beauty of the finished work.

Do not overlook the possibility of sculpting with driftwood, tree branches or hollowed out tree trunks. The tree which decays in the centre can often offer the most unusual almost pre-sculpted form.

### **Finishes for Wood sculptures**

Many pieces of wood sculpture are best left in the natural state particularly if the timber is very hard and has been burnished by the action of the cutting tool.

Many pieces can be burnished by simply rubbing with a bundle of shavings or a piece of hessian.

Unfortunately, newly cut timber may attract dirt and grease and its appearance can be permanently harmed. Some sealing treatment may be considered necessary and this can often be carried out using a couple of coats of white French polish (many proprietary brands are available) applied with a soft brush. This finish can be rubbed down with paper or fine steel wool to leave an egg shell gloss.

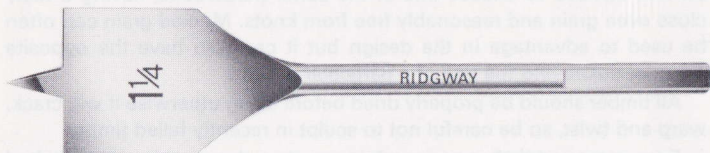
The sculpture could be improved by oiling and then burnishing with beeswax applied with a coarse cloth, linseed oil can be used for this purpose.

Generally this type of work fails to lend itself to lacquering or varnishing or any type of finish which has a high gloss.

Softwood sculptures can often be finished by slightly burning the surface with a blow torch and afterwards brushing vigorously in one direction with a steel brush. This serves to highlight the autumn or harder growth and improve the form. This treatment should be avoided with the very resinous timbers and timber with large knots.

## Additional Tools

The removal of waste is facilitated by the use of a Ridgway R355 Flatbit used in an electric drill. By boring holes in any direction and in any type of timber or grain it allows the sculptor to quickly proceed with the more interesting design work.



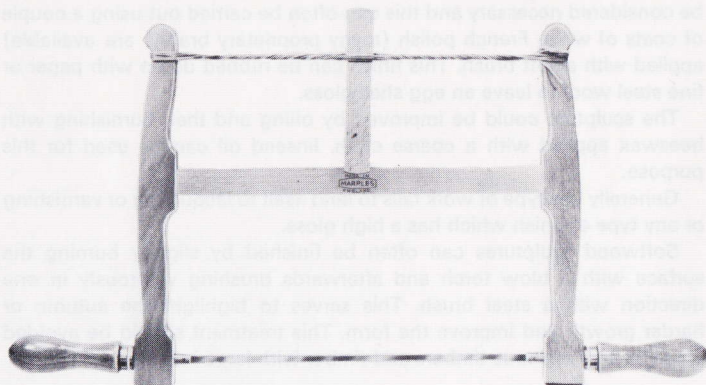
Alternatively, the Ridgway R220 Solid Centre Auger Bit can be used in a brace.



The Copping Saw or the Marples Bow Saw M2400

can also be used to quickly remove waste. Alternatively, a Bandsaw if available and having sufficient capacity will be found useful.

A flexible arm light is needed not only to provide a good light close to the work but also to show the effect of light and shade on the sculpture.





## Sculpting in Wood

The beginner may well be faced with the problem of just where to begin. The following suggestions are not meant to be slavishly copied but we hope may serve as a source of inspiration.

Anyone can sculpt, but to successfully carry out this craft certain basic rules should be followed.

Firstly, consider what you wish to make and make a rough sketch, full size if possible, to secure the correct proportions. Use squared paper and draw out the design to size, preferably producing a face and a side view.

Choose a suitable piece of wood, checking for flaws, cracks and knots, particularly loose or decayed ones. Examine the grain and colour of the wood before transferring your drawing, careful positioning in relation to the grain form could enhance the beauty of the finished work. At the same time be careful to avoid having short grain in the tail or leg of an animal or the more slender parts of a sculpting. Either transfer the drawing to the wood using

- (a) Carbon paper
- (b) Cut out the drawing and mark round it onto the wood on both faces and both ends.
- (c) Mark up the wood in squares on both faces and ends and graph the drawing.

Leave some waste wood for holding or prepare the block for wood carver screw fixing. Very large work may be fixed to a baseboard and set up on the ground.

If at all possible remove some waste with the bandsaw, bowsaw or coping saw. Use Ridgway Flatbits to pierce the sculpture or to remove waste should this not be possible with the saw. When removing the waste from the sides or ends, the marked lines may be removed, these must be withdrawn before proceeding.

To begin the actual sculpting, set the block up safely on the bench.

### Remember

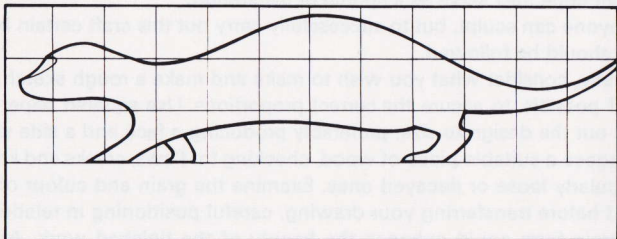
Sharp tools make for easy cutting and tools with polished ground bevels give a smooth finish to the cut.

Keep your hands behind the cutting edge.

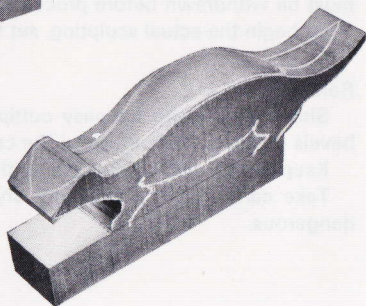
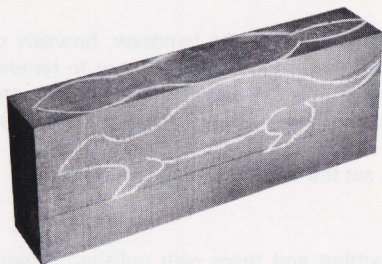
Take care when cutting very dry timber since flying chips can be dangerous.

## Sculpting a Small Figure

Draw out the figure on squared paper and in this particular case also draw a plan view.

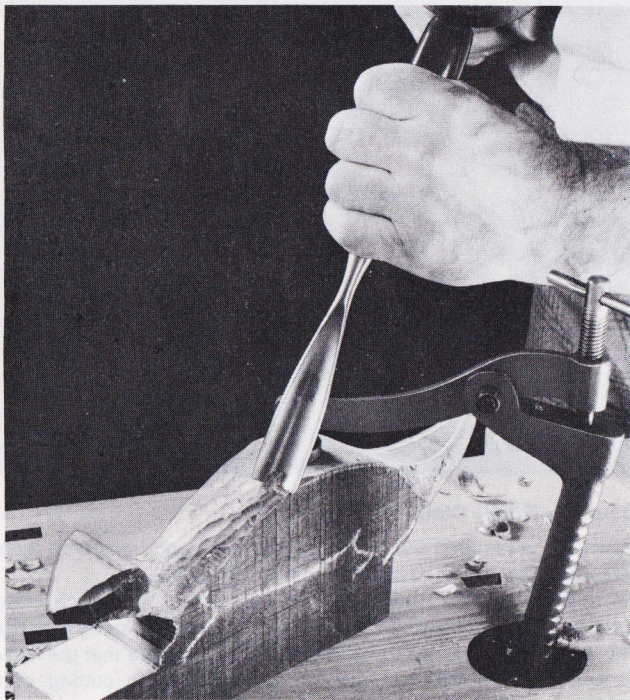


Select a piece of even grain timber (the grain should run lengthwise through the block) free from knots and cracks. Mark out on the four faces, leaving a waste piece running the entire length of the block. This is used to hold the block during sculpting and can be either sawn off or used as a mount when the work is complete.



Use the coping saw or other saws as available to remove the waste, cutting to the animal shape as closely as possible.

Mount the block in the vice or alternatively secure with a Record 145 Holdfast and use the 1 in. Fan tail gouge and the mallet to rough out the waste, the deep curve of the gouge allows cuts to be made without the corners digging in and the fan shape permits easy access to all parts of the work.



Round off the head and body and sculpt the tail, carefully changing over to the slow gouges to blend in the curves and arrive at a smoothly flowing sculpture. Cut in the head detail using small gouge and chisel. Shape the legs and reverse the sculpture. Remove as much of the waste block as necessary and cut away the waste inside the legs with a coping saw then carefully cut and shape the inside of the legs and the underside of the body.



The sculpture surface can be left from the tool or smoothed down with the slow gouge and finally papered.

After sculpting away the waste block, finish with oil and wax or other suitable finish.

Alternatively, the holding block itself may be sculpted to a rock or soil finish and used as a mount for the finished work.



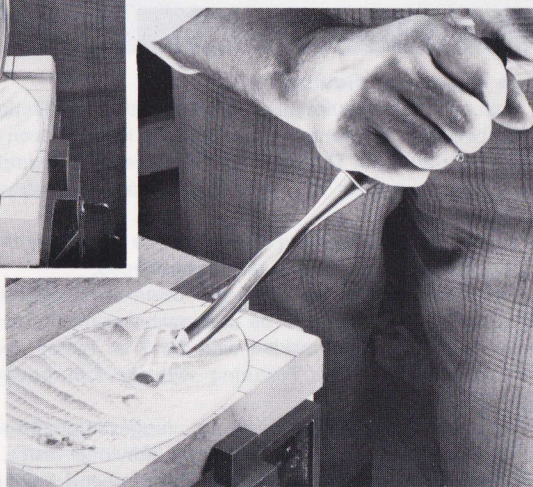
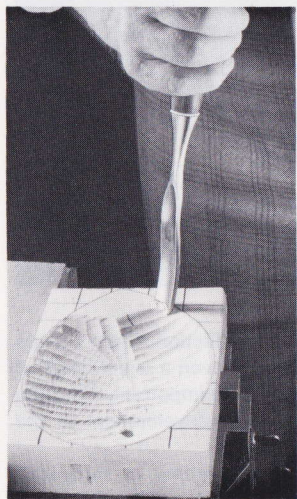
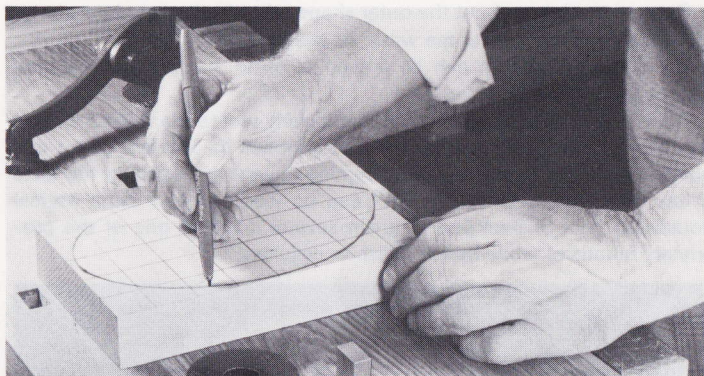
### **To Sculpt a Small Dish**

Draw out the required shape on squared paper and transfer to a piece of suitable timber, in this case, sycamore is suggested.

The board should be held securely on the top of the bench using a holdfast, the dog bench system or folding wedges as previously discussed.

Where the outside is also to be shaped, it is suggested that the heavier inside cutting be carried out first, although the basic cutting of the curved edge could be done with the saw at the outset.

Use the Bent gouge to rough out the work commencing a fraction in from the line. The design of the tool allows the cuts to be made, starting in the vertical and quickly lowering the tool into the horizontal, so that the dish shape is kept fairly shallow. Use the mallet, with short sharp blows. When the main mass of the waste has been removed use the  $\frac{5}{8}$  in straight gouge to smooth down the cuts and finish off the edges up to the line.





Reverse the job and cut the outer shape with the  $\frac{5}{8}$  in. straight gouge after removing as much of the waste as possible with a saw.

A smooth final finish can be arrived at using a curved scraper and various grades of glasspaper.

If the dish is to be used for food, particularly wet foods, it is suggested that Mazola or one of the cooking oils be rubbed in. This will give a dull polish but will prevent the dish becoming soured and spoiling the taste of the food. Alternatively, the dish can be wax polished using normal household wax or beeswax or given several coats of one of the proprietary brands of white french polish or cellulose.



### Free Expression Sculpture

Free expression sculptures can bring lasting satisfaction. Often a piece of driftwood or the partially decayed tree limb or even a reject baulk of timber can be used. The type of timber need not be important, although the colour and grain may well suggest a line of development in the sculpture.

Various types of tooling finish can be used together or separately depending on the shape and texture envisaged.

The shape may be arrived at by design or by discovery, in the latter case, preliminary work can be undertaken using the saw and drill. The main sculpting can be tackled with the 1 in. fantail and sharp corners worked with the chisel. Texturing with the  $\frac{3}{8}$  in. gouge or smoothing with the  $\frac{5}{8}$  in.

The following ideas are offered as suggestions and are not meant to be slavishly followed. Finishes can suit individual tastes. The reader may also care to try working in deal or scots pine and finishing the work by

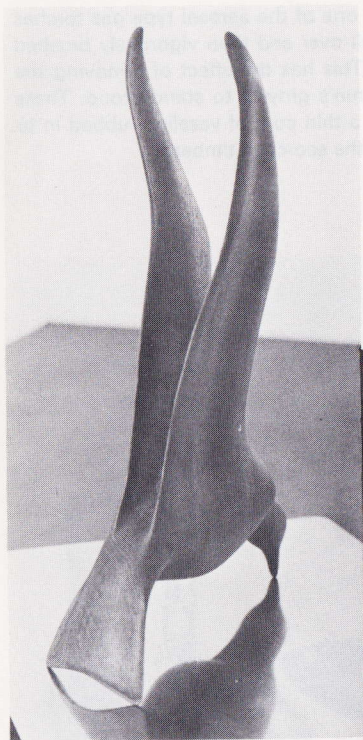


torching. A plumber's blow torch or one of the aerosol type gas torches can be used. The wood is scorched all over and then vigorously brushed in one direction with a wire brush. This has the effect of removing the softer growth and causing the autumn's growth to stand proud. These sculptures can be left unpolished or a thin coat of vaseline rubbed in to seal and enhance the appearance of the scorched timber.

### **Selected Work**



The sculptures above are samples of work created by students of a Record Ridgway Education Service wood sculpture course.



◀ 'Feeding Tern'  
by  
Rod Naylor.



'December' ▶  
by  
Rod Naylor.

## Sources of Timber

Local timber mills or timber yards may well be able to supply suitable timber in small quantities. The reader should not overlook the possibility of using old furniture, timber rejected by furniture manufacturers and other users of timber.

The following timber specialists pay particular attention to the supply of timber for education and other specialised areas of use in the U.K.:-

E. C. Young,  
P.O. Box 118,  
Carpenters Road,  
Stratford,  
London,  
E15 2DY.

Fitchett & Woollacott Ltd.  
Popham Street,  
Nottingham.

## Acknowledgments

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